## **PCT**

## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: WO 98/38035 (11) International Publication Number: A1 B32B 1/08, 7/12, 15/04, 27/32 (43) International Publication Date: 3 September 1998 (03.09.98) PCT/US98/03914 (81) Designated States: AU, BR, CA, JP, NZ, US, European patent (21) International Application Number: (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, - 27 February 1998 (27.02.98) (22) International Filing Date: MC, NL, PT, SE). **Published** (30) Priority Data: 08/808.093 28 February 1997 (28.02.97) US With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of (63) Related by Continuation (CON) or Continuation-in-Part amendments. (CIP) to Earlier Application 08/808,093 (CIP) US 28 February 1997 (28.02.97) Filed on (71) Applicant (for all designated States except US): VISKASE CORPORATION [US/US]; 6855 West 65th Street, Chicago, IL 60638 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): WILHOIT, Darrel, Loel [US/US]; 2290 East Weller Drive, Plainfield, IL 60544 (US). GEORGELOS, Paul, Nick [US/US]; 6 South 136 Cohasset Road, Naperville, IL 60540 (US). (74) Agent: GREEN, Raymond, W.; Brinks Hofer Gilson & Lione, NBC Tower, Suite 3600, 455 North Cityfront Plaza Drive, Chicago, IL 60611-5599 (US).

(54) Title: THERMOPLASTIC  $C_2$ - $\alpha$ -OLEFIN COPOLYMER BLENDS AND FILMS

## (57) Abstract

A polymer blend, and mono— and multilayer films made therefrom, having improved properties such as heat sealing or puncture resistance, wherein the blend has a first polymer of ethylene and at least one  $\alpha$ -olefin having a polymer melting point between 55 to 75 °C; a second polymer of ethylene and at least one  $\alpha$ -olefin having a polymer melting point between 85 to 110 °C; a third thermoplastic polymer having a melting point between 115 to 130 °C; and optionally a fourth polymer, e.g. EVA, having a melting point between 90 to 100 °C.